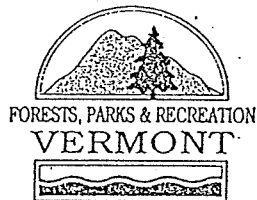


State of Vermont
Agency of Natural Resources
Department of Forests, Parks and Recreation
103 South Main Street
Waterbury, Vermont



LAND MANAGEMENT PLAN
BLACK TURN BROOK STATE FOREST

Prepared by

Jeff Briggs
Richard Greenwood
David Willard
Hollis Prior

December 6, 1996

Approved: Conrad M. Motyka
Conrad M. Motyka, Commissioner

Date: January 19, 1997

TABLE OF CONTENTS

Abstract	1
History	7
Vegetative Types	10
Implementation/Treatment Schedule	12
Biodiversity	15
Recreation	18
Wildlife	19
Roads	20
Fire Management Plan	23
Public Input	24
Summary of Public Comments Form	25
Response to Public Comments	26
Appendix	32

ABSTRACT

Black Turn Brook State Forest will be managed for the next 20 years (the period of this plan) for low impact uses. This was the strong message which we received from public input, and it fits the Department of Forest Parks and Recreation's agreement, deed provisions, and grant conditions with the Vermont Land Trust. The Vermont Housing and Conservation Board provided the money to the Vermont Land Trust and the State of Vermont acquire the land.

The overall goal will be to enhance wildlife habitat, while keeping the appearance and character of the parcel relatively the same as it is at present. Timber harvesting will be low intensity, openings will be limited in size, and activities will take place as necessary in different parts of the parcel at five year intervals during the life of this plan. The goal will be to create and maintain a mixture of ages and sizes of trees. Recreation will be low impact and nonmotorized. Primitive camping will be allowed, subject to the Primitive Camping rules. Educational use will be encouraged. No new structures will be built.

Access to the parcel will be provided by the present right-of-way from Route 114 over the bridge. The department is studying several options for parking at the intersection with Route 114 and intends to develop a four-six car parking

area in the fall of 1996. The access will remain gated, but access by foot to the parcel will only be about a quarter-mile. The Department feels that this option will resolve major problems with trash and dumping of household goods along the right-of-way, that it will provide the safest parking area, and that it will help encourage minimum impact use of the parcel in a manner consistent with the management plan.

Black Turn Brook State Forest has very little potential for developing significant cultural or historic resources. However, a memorial rock located several hundred feet south of the bridge on the west side of the river, does exist, telling of the past use of this parcel as an alternative way of life.

Spruce and fir forests dominate the 592 acre parcel, with runs of alder and pioneer hardwood species occurring in the riparian zones. Spruce and Fir, while relatively common in this region of Vermont, are not overly abundant on the public lands. Biodiversity on this parcel could best be conserved and enhanced by managing for a healthy spruce fir forest, which is in close proximity to the Bill Sladyk Wildlife Management Area. Spruce and Fir are the climax species for this site and have historically provided critical wildlife habitat. For these reasons, the department feels it is important to maintain the Spruce-Fir forests on Black Turn Brook State Forest. We have proposed an uneven aged timber harvesting plan which will maintain a substantial part of the over story while allowing for regeneration in this important

forest type. In addition, we will try to increase the proportion of spruce which will make these stands less vulnerable to future infestations of spruce budworm.

Past harvesting activities have created various age classes of spruce and fir. Some harvested areas support a stocking of birch and aspen with an understory of softwood. These past harvest cuts have created a number of age and size classes in the spruce-fir type that will facilitate the management of the parcel as a deer wintering area.

Historically this area has provided winter deer cover as part of the Coaticook yard. Maintaining current cover and developing additional yard area will be a high priority for this parcel. Two significant beaver ponds exist and will be managed as wetland habitat. Two small streams and the Coaticook River provide fishing opportunities. Buffers will be maintained on these water courses.

Spruce grouse sign has been found on the property by the District Wildlife Biologist. Although confirmed sightings are not substantiated, droppings have been found indicating birds have traveled through the parcel.

Currently a road system enters the southeast portion of the property via a deeded right-of-way from Vermont Route 114. This road crosses the Coaticook River on the easterly boundary. A newly reconstructed bridge is capable of handling loads in excess of 100,000 lbs. On the westerly side of the river a total of two miles of winter or dry weather roads service approximately half the parcel. These roads have no

cross drainage structures or ditches and are too narrow for truck traffic, however they are relatively stable and erosion is not a problem due to the flat terrain and soils. Although no quality gravel is known to exist, abundant fill occurs at a number of sites. All major maintenance and a limited amount of new construction will occur in conjunction with planned harvest activities.

Recreational pursuits have been limited primarily to hunting and fishing. This is unlikely to change significantly in the near future.

Black Turn Brook Brook State Forest

Norton, Vermont



HISTORY

The 592 acres which comprise Black Turn Brook State Forest had a relatively quiet history of human use until 1970. The glaciers left shallow, wet, poorly drained soils, interspersed with sandy dry deposits and areas of ledge. These limitations combined with a cold, short growing season, made the area unsuitable for farming. Timber was the predominant use. The area has been a productive site for spruce and fir, and probably scattered white pine as well. About 1969 a significant timber harvest took place, when approximately 300 acres were harvested. Eighty more acres were harvested around 1990. In both cases there were no forestry plans involved.

In 1970, the area was purchased by a communal group of people, and became the site of Earth People's Park. The philosophy of the group was "Free Land for Free People". At various times over the next few years there were a number of people camping on the land and one to two dozen cabins and camps were erected on the property. A monument to this period of the forest's history was dedicated in 1994 at a site by the Coaticook river.

By the late 1970's most if not all of the commune's founders had left and the number of inhabitants had dwindled

to just a few. In 1990, the property was seized by United States Marshals, who found marijuana growing on the parcel. The parcel remained in legal limbo for the next several years. Negotiations leading to state acquisition, began under a provision in the drug seizure laws which allows land to be transferred to a state at the request of the governor for use "as a public area to be preserved in perpetuity for its natural conditions". An agreement was reached between the United States Government, the communal group which had owned the property, the State of Vermont, and the Vermont Land Trust.

In March of 1994, the area was formally acquired by the State of Vermont under a grant agreement with the Vermont Land Trust. The Vermont Housing and Conservation Board provided the money to the Land Trust and the State to acquire the Land. The area is to be managed by the Vermont Department of Forests, Parks, and Recreation.

In the summer of 1995, the remains of the structures and scattered trash piles were cleared by the department. Approximately 29 tons of garbage and at least 12 tons of metal (including a number of old vehicles) were removed from the site. Cleanup costs were \$8500 plus approximately 40 man days. This was in addition to cleanup efforts undertaken by some of the former residents prior to the State acquisition. Although most of the vehicles and a good deal of trash had been there awhile, a significant portion of it was recent and

had been dumped since the area was abandoned. Indeed, illegal dumping continued as the cleanup was in progress, indicating an ongoing problem.

VEGETATIVE TYPES

The vast majority of this parcel consists of red spruce and balsam fir. There is a small amount of white cedar, eastern hemlock, eastern white pine, and black spruce mixed in. The other type found here is the pioneer hardwoods, consisting of quaking aspen and paper birch which have colonized some of the openings. There are several small openings, principally in the area of the former Earth People's park site. In addition, a substantial acreage of alder swales and open water wetlands are well distributed throughout this parcel. This acreage will not be disturbed by management activities. Under the proposed uneven aged management scheme, buffers will be retained along this type.

The presence of significant primary softwood sites and adjoining hardpan soils will prohibit any attempts to convert these sites to hardwood stands of any quality. In addition, there are areas of sandy soils on the higher elevations which are too well drained to support quality hardwoods. The entire property exhibits approximately forty feet in elevation change. These slightly elevated sites have low fertility. In some cases, pioneer hardwoods have become established due to past cutting practices.

Management Strategies:

Management emphasis on the entire forest will be for improvement and maintenance of wildlife habitat, and tree health, and to conserve the spruce fir type to maintain and improve biodiversity.

The spruce fir type will be managed uneven aged to insure continuous cover. Individual tree and group selection will be practiced. Any larger openings will be limited to one-quarter acre in size, most openings will be smaller. Past experience in this has shown that openings no more than 30-40 wide are optimum for spruce fir regeneration. Where possible, spruce will be left and balsam fir will be cut. Research has shown that stands with a higher component of spruce are less susceptible to spruce budworm and are healthier over all. Also, red spruce is much longer lived and more windfirm than balsam fir. It is likely that these stands historically had a higher percentage of spruce than they do now.

Cedar and hemlock will not be harvested. These species are infrequent on the parcel and should be retained to increase diversity. White Pine should be planted to introduce diversity and augment the developing under story of spruce and fir. White Pine is native to the site, but was largely eliminated in past timber harvests. If white pine planting

stock is available they will be planted as soon as possible after a harvest cut. The purpose of this planting would not be to create a plantation of white pine, but to provide for a future seed source.

Implementation and Treatment Schedule:

The 592 acre parcel will be divided into four management areas. This will break the area up into four geographically separate units which will be easy to work with at 5 year intervals over a 20 year period. Within each management area, treatments will primarily only occur in the Spruce/Fir type (page 11). In 1998, one management area will be inventoried and treatment scheduled as necessary. In 2003 another management area will be checked. Following this schedule a different management area will be inventoried each five years, so that in 20 years the entire acreage will be covered and treatment will then shift back to the first area. This will produce a cutting cycle of 20 years. Management areas, acreage of Spruce/Fir, year of examination and treatment are as follows:

Management Area	Spruce/Fir Acreage	Treatment Year
4	72	1998
3	107	2003
2	143	2008
1	68	2013

BIODIVERSITY

Black Turn Brook State Forest is a relatively small parcel, located in an area of the state which most ecologists classify as the Northeast Highlands. It is a part of the Northern Forest, an area of increasing state and national interest from a biodiversity standpoint

The small size of this parcel, 592 acres, limits the opportunity to increase or enhance the biodiversity of the area itself. The proposed low intensity management plan, with its emphasis on maintaining softwood cover for deer, and habitat for rare species such as the spruce grouse and black backed woodpecker will also maintain the present biodiversity of the area.

Under our current understanding of Biodiversity, Black Turn Brook State Forest also needs to be looked at to see how it fits in with surrounding lands. From an ownership perspective, it may be viewed as an island of public land, surrounded by private land, but in close proximity to the 10,000 acre Bill Sladyk Wildlife Management Area. One of the reasons the state of Vermont was interested in Black Turn Brook, was this tie to the Sladyk W.M.A. Ecologically, the two areas are very similar, and it can be expected that many of the same plants and animals would be found in both. The

proposed management plan reflects many of the same goals as in the management of Sladyk, with an emphasis on improving and maintaining wildlife habitat through low intensity timber harvest where necessary, and protecting the resource.

As this plan was being written, the State of Vermont and the Hancock Timber Resource group reached an agreement on a 31,000 acre conservation easement under the federally funded Forest Legacy Program. Other participants in the agreement are the Conservation Fund, The Vermont Land Trust, The Vermont Housing and Conservation Board, and the U.S. Forest Service. The easement will restrict development and provide permanent public access while managing the land for sustainable long term forestry purposes. Parts of this easement are directly adjacent to Black Turn Brook State Forest and will further enhance the biodiversity opportunities on this parcel.

The spruce/ fir forests, while common to the local area, are not widely distributed statewide. There isn't a lot of the spruce fir type in public ownership. Past management of all these spruce fir forests has resulted in more balsam fir and less red spruce. The proposed mangement plan empahasizes the maintenance of this spruce fir type and specifically states that balsam fir will be favored to be cut, while red spruce will be favored to be left. Red Spruce is a longer lived species.

The only rare or endangered species identified so far on the parcel are the previously mentioned black backed

woodpecker and spruce grouse, from which the district wildlife has found droppings. Both of these species depend on the spruce fir type. No thorough inventory has been done, however, and we will continue to work with the wildlife biologists to identify such species.

RECREATION

Low impact recreation will be emphasized. Hiking, hunting, fishing, bird watching, swimming, canoeing, cross country skiing and snowshoeing are all examples of different types of low impact recreational activities which will be encouraged. Existing roads and trails can be utilized. No new trails are planned.

Motorized vehicles will not be allowed past the gate. This includes snowmachines.

Primitive camping will be allowed under the existing guidelines for primitive camping on state lands. Primitive camping is allowed on designated State lands. The department intends to ammend the list of designated areas of primitive camping to include the Black Turn Brook State Forest.

Low impact recreation will fit in well with the overall emphasis on wildlife management and low intensity, unevenaged timber management on this parcel.

WILDLIFE

The Coaticook deer yard encompasses Black Turn Brook State Forest. Unfortunately substantial acreage of this yard has been subjected to heavy timber harvest over the past twenty years. B.T.B.S.F. contains some of the best cover remaining in this yard. Most treatments described in the vegetative management section of this plan are designed to improve the carrying capacity of this yard.

Ruffed grouse are numerous on this parcel. Some treatments will strive to create three size classes of Aspen to provide food, cover, and nesting habitat. Because spruce grouse are known to be in this area and are an endangered species in Vermont, signs will be maintained on the property to alert grouse hunters to be sure of their target.

The two beaver ponds on the property will be buffered to protect this habitat.

ROADS

The present road system is inadequate in both quantity and quality to facilitate management practices. Timber sales will take place under frozen conditions. Consequently, road construction will be limited to winter quality standards. Appropriate drainage structures will be installed to protect water quality. Road surface material will generally be of native material and attempts will be made to limit maximum skidding distances to ½ mile or less. Road construction will take place in conjunction with planned management activities once every five years.

Planned Activities

ROAD NUMBER	FISCAL YEAR	WORK NEEDED
2	1999	Drainage-ditches, culverts as needed. Widen road travel surface to 16 feet.
4	1999	Construct winter quality road 16 feet wide with ditches and cross drainage.
3	2009	Widen road surface to 16 feet with ditches and cross drainage

5	2009	Construct to winter quality- 16 feet travel surface-- cross drainage.
1	2014	Widen road surface to 16 feet with cross drainage.

FIRE MANAGEMENT PLAN

Black Turn Brook State Forest covers 592 acres within boundaries of the town of Norton. This property borders on the Province of Quebec, Canada and lies west of the Coaticook River. The property is vegetated with a mixture of hard and softwood species, open lands, and wetlands.

Access to the property is by a dirt road right-of-way approximately one mile south of the Norton fire station. The entrance may be gated year round, but access for wildland fire suppression will be the responsibility of the Town Fire Warden.

PUBLIC INPUT

A public involvement meeting was held on January 10, 1996, at the Norton Village School. Approximately 35 people attended. As a result of this meeting, a survey was mailed to those attending to further refine their comments. The comment period extended until February 10, 1996, and several comments were received. Copies of the meeting material, survey and comments received are included in the appendix.

In addition to this meeting, a number of other interested people were contacted by mail or by phone.

Black Turn Brook State Forest Summary of Public Comments

Please rank the following comments on a scale of 1 to 5,

1=Strongly Agree 2=Agree 3=Neutral 4=Disagree 5=Strongly Disagree

1. The access to the parcel through the right of way should be left ungated. _____
2. Access needs to be controlled with a gate, but the gate needs to be moved nearer the bridge, with adequate parking provided. _____
3. Management should emphasize low impact recreation, leaving the parcel undeveloped and in relatively the same condition as it is at present. _____
4. Management should emphasize wildlife habitat and low impact uses which don't conflict with wildlife. _____
5. Camping should be allowed as long as it is done under the Primitive Camping Rules (Limit stay, and group size) which apply to most other areas of state land. _____
6. Management should encourage educational use of the parcel, particularly by local youth groups. _____
7. The parcel should be managed for multiple use, forestry, recreation, education, wildlife, conservation. _____
8. Snowmobiles should be allowed on designated trails on this parcel. _____
9. Nonmotorized Recreation trails should be designated _____

Thankyou for answering these questions. If you would like to comment on one of the questions above in more detail, please do so in the space below. Please feel free to relay any concerns or other suggestions as we develop and implement the management plan.

Response to Public Comments

- 1. Comment:** The main right-of-way from Route 114 to the bridge over the Coaticook River should be ungated or the gate should be moved.

Response: This was an issue which people felt strongly about, but were divided over. We received a number of comments about the gate and access to this parcel through the right-of-way. Several people felt strongly that there should be no gate on this road, that it is public land and that the access should be open to all. However, the landowners who own the land where the right-of-way crosses, felt that we should control access with a gate to prevent trash dumping and to prevent people from driving through the adjacent field. Several other people made this comment as well. A third group of people felt there should be a gate at the bridge. Most people agreed that there needed to be a safe place to park. Several felt that we ought to install dumpsters to solve the trash problem.

The legal facts are that the state has a deeded right-of-way from Route 114 to the bridge, which was acquired by the former owners and came with the purchase by the state. In making a decision like this, the department tries to come up with a solution which balances the rights of the public to access, with the rights of the landowners who own the land which the right-of-way crosses. There has been a significant problem in the last several years with trash dumping. There has also been a problem with people driving on to, or across the adjacent field. The Department has decided to resolve this issue by installing a gate on the access road and developing a four to six car parking lot at the intersection with Route 114. This will hopefully reduce illegal trash dumping, address the concerns of the adjoining landowners, and provide a safe parking area. At the same time, public access to the parcel

will remain, as this proposed area is only a quarter-mile walk from the property. This will also help us to manage this area for low impact use.

2. **Comment:** Access needs to be controlled with a gate, but the gate needs to be moved nearer the bridge, with adequate parking provided.

Response: See Response #1

3. **Comment:** Management should emphasize low impact recreation, leaving the parcel undeveloped and in relatively the same condition as it is at present.

Response: This was a theme we heard from the vast majority of comments. The plan as presented accomplishes this goal. Through it's main goal of low intensity harvesting and management of wildlife habitat, the plan will leave the parcel undeveloped. There are no plans to develop the parcel for recreation, to open it to motorized vehicles, or to develop more trails. In the survey which we mailed out to the public, we asked people to respond to the statement "Snowmobiles should be allowed on designated trails on this parcel" A majority of the public disagreed. Additional comments at the public meeting reflected this, the majority did not want snowmobiles. Some people were in favor of snowmobiles, with one person stating that they could just use it to run a trail through. However, as several respondents put it, "this parcel is too small to allow motorized vehicles."

Another statement asked that we respond to the comment — "Nonmotorized recreation trails should be designated on this parcel." A majority of the public agreed. The intent of this statement was to find out if people wanted the trails and roads to have signs. Most people agreed. One person,

however, disagreed stating the people should be able to walk wherever they want. It should be noted here that designating a trail does not preclude people from walking, skiing, or hiking wherever they please. Designating a trail may help publicize the opportunities which are available, or may serve to channel use towards those areas which we feel are able to handle the use. There are certain uses, such as mountain bikes; which even though they are nonmotorized, can cause problems if not confined to certain trails.

4. **Comment:** Management should emphasize wildlife management and low impact uses which do not conflict with wildlife.

Response: See response to comment two above. We believe the plan will accomplish both these goals.

5. **Comment:** Camping should be allowed as long as it is done under the Primitive Camping rules (Limit stay and group size) which apply to most other areas of state land.

Response: This was an issue which people either strongly agreed with, or strongly disagreed with. However, two-thirds of the respondents agreed they would like to see Black Turn Brook State Forest open for primitive camping. The plan reflects this majority opinion.

At the present time, most areas of state land are open to primitive camping. Our experience, is that use is quite low, compared to the developed areas. We suspect this will be the case with Black Turn Brook State forest as well. We believe that there is a need to offer a low impact, primitive camping experience on state lands, which is quite different from that of the developed experience. Black Turn

Brook State Forest, with its remote location and opportunities for solitude offers an excellent opportunity for primitive camping. Please note that in primitive camping areas, the department offers no facilities of any kind, even though one person wanted us to consider building a centrally located pavilion like structure along with outhouses. Our experience has been that structures and outhouses are extremely difficult to maintain in non developed settings.

Some of the concern over primitive camping is a result of the parcel's past history as *Earth People's Park*. Some people may fear a return to past, with many people camping out all summer. We don't anticipate any great influx of people at all, in fact we believe that overnight use will be very low. We would like to point out that the **Primitive Camping Regulations** limit both group size and length of stay. Specifically — the regulations say:

1. Camping is limited to not more than three consecutive nights in the same area.
2. Groups of eleven or more individuals must obtain a permit in order to primitive camp.
3. Camping must be at least 100 feet from any stream or body of water, 200 feet from any trail or property line, and 1,000 feet from any traveled road.
4. Only dead and down trees or branches may be used for firewood.
5. There shall be one responsible adult for every 4 campers under the age of 14.
6. **Comment:** Management should encourage educational use of the parcel, particularly by local youth groups.

Response: The department encourages educational use of this property, especially with local youth groups. We would believe that educational use of parcel could take place in such a way that it would

fit in with the overall goal of low impact management. The department received several comments from a local sportsman's group that would like to see an conservation youth camp developed on this property, similar to those at Buck Lake, or Lake Bomoseen. This proposal involves a very complex issue which would need to be carefully studied by all parties to agreement. The terms of the agreement between the Vermont Housing and Conservation Board and the State, place very specific limitations on the construction of new structures on the property. (see Appendix) In addition, it would need to be looked at by the VT. Fish and Wildlife Dept., which runs the two present camps. The department has initiated discussions with the sportsman's group as well as the VT. Fish and Wildlife Dept., to study the feasibility of such a proposal and to look at alternatives, such as working cooperatively at one of the existing camps.

7. **Comment:** The parcel should be managed for multiple use, forestry, recreation, education, conservation, and wildlife.

Response: The public told us that they are interested in seeing Black Turn Brook State Forest managed for a number of different uses and we believe that the plan balances those uses. By choosing an overall goal of low impact management, we can accommodate a number of different uses on this parcel. Though most people were in agreement on the uses they wanted to see, there were a few differences of opinion. Several people wanted to see the land closed to hunting. This is not possible under the current Vermont statutes governing land management by the Vermont Department of Forests, Parks, and Recreation. It should be noted that the vast majority of public comment supported hunting. Once again, the main thing that came through in the public comments, was that people

wanted to see it open for use as long as it was low impact and didn't substantially change the way things are now.

8. Comment: Snowmobiles should be allowed on Designated trails on this parcel.

Response: See Response #3.

9. Comment: Nonmotorized recreation trails should be designated.

Response: See Response #3.